

**Cullin 1 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP50201****Specification**

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**Cullin 1 Antibody - Product Information**

Application	WB, IF, IHC
Primary Accession	<a href="#">Q13616</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	90 KDa
Antigen Region	745-776

**Cullin 1 Antibody - Additional Information****Gene ID** 8454**Other Names**

Cullin-1, CUL-1, CUL1

**Dilution**

WB~~ 1:1000

IF~~1:100

IHC~~1:50-1:100

**Format**Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.**Storage Conditions**

-20°C

**Cullin 1 Antibody - Protein Information****Name** CUL1**Function**

Core component of multiple cullin-RING-based SCF (SKP1-CUL1- F-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. SCF complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed:<a href="http://www.uniprot.org/citations/22017875" target="\_blank">22017875</a>, PubMed:<a href="http://www.uniprot.org/citations/22017877" target="\_blank">22017877</a>, PubMed:<a href="http://www.uniprot.org/citations/27565346" target="\_blank">27565346</a>). In the SCF complex, serves as a rigid scaffold that organizes the SKP1-F-box protein and RBX1 subunits. May contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed:<a href="http://www.uniprot.org/citations/38326650" target="\_blank">38326650</a>). The E3

ubiquitin- protein ligase activity of the complex is dependent on the neddylation of the cullin subunit and exchange of the substrate recognition component is mediated by TIP120A/CAND1 (PubMed:<a href="http://www.uniprot.org/citations/12609982" target="\_blank">12609982</a>, PubMed:<a href="http://www.uniprot.org/citations/38326650" target="\_blank">38326650</a>). The functional specificity of the SCF complex depends on the F-box protein as substrate recognition component (PubMed:<a href="http://www.uniprot.org/citations/38326650" target="\_blank">38326650</a>). SCF(BTRC) and SCF(FBXW11) direct ubiquitination of CTNNB1 and participate in Wnt signaling. SCF(FBXW11) directs ubiquitination of phosphorylated NFKBIA. SCF(BTRC) directs ubiquitination of NFKBIB, NFKBIE, ATF4, SMAD3, SMAD4, CDC25A, FBXO5 and probably NFKB2. SCF(BTRC) and/or SCF(FBXW11) direct ubiquitination of CEP68 (PubMed:<a href="http://www.uniprot.org/citations/25503564" target="\_blank">25503564</a>, PubMed:<a href="http://www.uniprot.org/citations/25704143" target="\_blank">25704143</a>). SCF(SKP2) directs ubiquitination of phosphorylated CDKN1B/p27kip and is involved in regulation of G1/S transition. SCF(SKP2) directs ubiquitination of ORC1, CDT1, RBL2, ELF4, CDKN1A, RAG2, FOXO1A, and probably MYC and TAL1. SCF(FBXW7) directs ubiquitination of CCNE1, NOTCH1 released notch intracellular domain (NICD), and probably PSEN1. SCF(FBXW2) directs ubiquitination of GCM1. SCF(FBXO32) directs ubiquitination of MYOD1. SCF(FBXO7) directs ubiquitination of BIRC2 and DLGAP5. SCF(FBXO33) directs ubiquitination of YBX1. SCF(FBXO1) directs ubiquitination of BCL6 and DTL but does not seem to direct ubiquitination of TP53. SCF(BTRC) mediates the ubiquitination of NFKBIA at 'Lys-21' and 'Lys- 22'; the degradation frees the associated NFKB1-RELA dimer to translocate into the nucleus and to activate transcription. SCF(CCNF) directs ubiquitination of CCP110. SCF(FBXL3) and SCF(FBXL21) direct ubiquitination of CRY1 and CRY2. SCF(FBXO9) directs ubiquitination of TTI1 and TELO2. SCF(FBXO10) directs ubiquitination of BCL2. Neddylated CUL1-RBX1 ubiquitinates p53/TP53 recruited by Cul7-RING(FBXW8) complex (PubMed:<a href="http://www.uniprot.org/citations/35982156" target="\_blank">35982156</a>). SCF(BTRC) directs 'Lys-48'-linked ubiquitination of UBR2 in the T-cell receptor signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/38225265" target="\_blank">38225265</a>).

#### Tissue Location

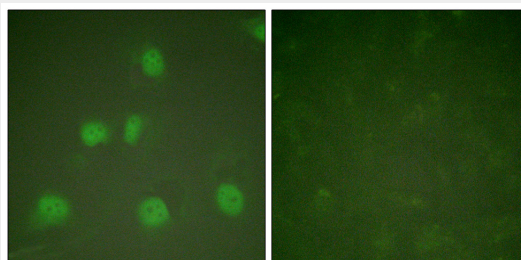
Expressed in lung fibroblasts.

#### Cullin 1 Antibody - Protocols

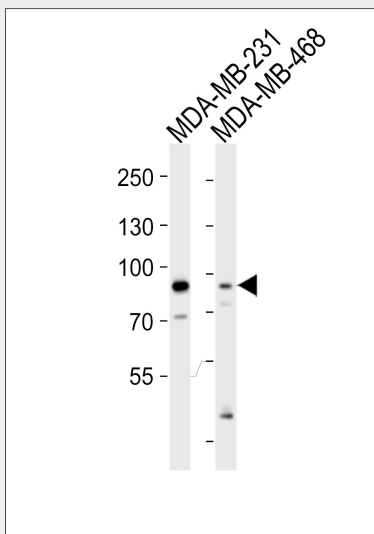
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

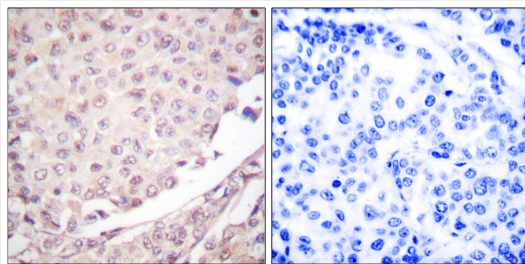
#### Cullin 1 Antibody - Images



Immunofluorescence analysis of HeLa cells, treated with PMA (125ng/ml, 30mins), using Cullin 1 antibody .



Western blot analysis of lysates from MDA-MB-231,MDA-MB-468 cell line (from left to right),using Cullin 1 Antibody(C0162). C0162 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using Cullin 1 antibody .

### Cullin 1 Antibody - Background

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translocate into the nucleus and to activate transcription. SCF(CCNF) directs ubiquitination of CCP110. SCF(FBXL3) and SCF(FBXL21) direct ubiquitination of CRY1 and CRY2. SCF(FBXO9) direct ubiquitination of TTI1 and TELO2.

### **Cullin 1 Antibody - References**

Kipreos E.T.,et al.Cell 85:829-839(1996).  
Michel J.J.,et al.Cell Growth Differ. 9:435-449(1998).  
Bechtel S.,et al.BMC Genomics 8:399-399(2007).  
Hillier L.W.,et al.Nature 424:157-164(2003).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

### **Cullin 1 Antibody - Citations**

- [Potential Involvement of SCF-Complex in Zygotic Genome Activation During Early Bovine Embryo Development.](#)
- [Expression of CUL1 correlates with tumour-grade and recurrence in urothelial carcinoma.](#)